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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/825,234 | 04/16/2004 | Chin-Juei Tung | 3074/150 | 7785 |
| 22429 | 7590 | 09/27/2006 | | |
| LOWE HAUPTMAN BERNER, LLP | | | EXAMINER | |
| 1700 DIAGONAL ROAD | | | COOLEY, CHARLES E | |
| SUITE 300 | | | | |
| ALEXANDRIA, VA 22314 | | | ART UNIT | PAPER NUMBER |
| | | | 1723 | |

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------|-----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/825,234 | TUNG, CHIN-JUEI |
| | Examiner | Art Unit |
| | Charles E. Cooley | 1723 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 April 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application
- 6) Other: ____.

NON-FINAL OFFICE ACTION

1. This application has been assigned to Technology Center 1700, Art Unit 1723

and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to Art Unit 1723.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Drawings

2. The examiner has approved the drawings filed on 16 APR 2004.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. The abstract is acceptable.

5. The title is acceptable.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 2421669.**

FR 2421669 discloses in Figure 2 the recited subcombination of a stirring device including an air output device 16 adapted to be immersed in the tank 1; a high pressure tank 38 adapted to be in communication with the tank by a connection tube 25, 33; a unidirectional valve 22 or 27 or 31 in communication with the high pressure tank and the tank; wherein the high pressure tank has a first pressure gauge 36 and a second pressure gauge 37; wherein the high pressure tank has a connector (Fig. 2) mounted on the high pressure tank for connection with the connection tube; wherein the connection tube is adapted to communicate with the recycling tube 43 (at location 46); wherein the air output device is a hollow body with multiple air holes 17 defined through a surface of the hollow body to allow the air from the high pressure tank to flow into the tank.

With regard to the claims that recite “wherein the high pressure tank contains therein nitrogen”, a recitation with respect to the material intended to be worked upon by a claimed apparatus (the gas, namely nitrogen in this instance) does not impose any structural limitations upon the claimed apparatus, which differentiates it from a prior art apparatus satisfying the structural limitations of that claimed. See *Ex parte Masham*, 2

USPQ2d 1647, 1648 (Bd. App. 1987). Also see *In re Rishoi*, 197 F.2d 342, 344, 94 USPQ 71, 72 (CCPA 1952); and *In re Young*, 75 F.2d 996, 997, 25 USPQ 69, 70 (CCPA 1935). Accordingly, the recitation of what particular substance is contained within the high pressure tank apparatus is not germane to the patentability of the tank apparatus itself.

8. Claims 1, 2, 3, 6, 7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Schafer et al. (US 4,878,758).

Schafer et al. discloses in the sole Figure the recited subcombination of a stirring device including an air output device 5.1 adapted to be immersed in the tank 6; a high pressure tank 3 adapted to be in communication with the tank by a connection tube; a unidirectional valve 3.4 or 4 in communication with the high pressure tank and the tank; wherein the high pressure tank has a first pressure gauge 3.1 and a second pressure gauge 3.3; wherein the high pressure tank has a connector (upstream of 3.4) mounted on the high pressure tank for connection with the connection tube; wherein the air output device is a hollow body with multiple air holes 5.2 defined through a surface of the hollow body to allow the air from the high pressure tank to flow into the tank.

With regard to the claims that recite “wherein the high pressure tank contains therein nitrogen”, a recitation with respect to the material intended to be worked upon by a claimed apparatus (the gas, namely nitrogen in this instance) does not impose any structural limitations upon the claimed apparatus, which differentiates it from a prior art apparatus satisfying the structural limitations of that claimed as noted above.

9. Claims 1, 4, 6, 8, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 2482471.

FR 2482471 discloses in Figures 1-2 the recited subcombination of a stirring device including an air output device 6 adapted to be immersed in the tank 1; a high pressure tank 20 adapted to be in communication with the tank by a connection tube 3, 22, 30; a unidirectional valve 31 or 35 in communication with the high pressure tank and the tank; wherein the high pressure tank has a connector (Fig. 2) mounted on the high pressure tank for connection with the connection tube; wherein the connection tube is adapted to communicate with the recycling tube 16 (at location 28); wherein the air output device is a hollow body with multiple air holes 7 defined through a surface of the hollow body to allow the air from the high pressure tank to flow into the tank.

With regard to the claims that recite “wherein the high pressure tank contains therein nitrogen”, a recitation with respect to the material intended to be worked upon by a claimed apparatus (the gas, namely nitrogen in this instance) does not impose any structural limitations upon the claimed apparatus, which differentiates it from a prior art apparatus satisfying the structural limitations of that claimed as noted above.

10. Claims 1, 2, and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 3-72934.

JP 3-72934 discloses in Figure 1 the recited subcombination of a stirring device including an air output device 6 adapted to be immersed in the tank 1; a high pressure

tank 4 containing nitrogen (per the abstract) adapted to be in communication with the tank by a connection tube 5; a unidirectional valve 8 in communication with the high pressure tank and the tank; wherein the high pressure tank has a first pressure gauge and a second pressure gauge (seen at 7); wherein the high pressure tank has a connector (proximate 4) mounted on the high pressure tank for connection with the connection tube.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schafer et al. (US 4,878,758).**

Although not germane to patentability as explained above, the patent to Schafer et al. discloses a gas in the high pressure tank but not nitrogen. JP 3-72934 discloses in Figure 1 the recited subcombination of a stirring device including an air output device 6 adapted to be immersed in the tank 1; a high pressure tank 4 containing **nitrogen** (per the abstract) adapted to be in communication with the tank by a connection tube 5; a unidirectional valve 8 in communication with the high pressure tank and the tank; wherein the high pressure tank has a first pressure gauge and a second pressure

gauge (seen at 7); wherein the high pressure tank has a connector (proximate 4) mounted on the high pressure tank for connection with the connection tube. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the gas in the high pressure tank of Schafer et al. with nitrogen as taught by JP 3-72934 for the purpose of enhancing the dispersion of the material in the tank (per the abstract).

13. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2421669.

Although not germane to patentability as explained above, FR 2421669 discloses a gas in the high pressure tank but not nitrogen. JP 3-72934 discloses in Figure 1 the recited subcombination of a stirring device including an air output device 6 adapted to be immersed in the tank 1; a high pressure tank 4 containing **nitrogen** (per the abstract) adapted to be in communication with the tank by a connection tube 5; a unidirectional valve 8 in communication with the high pressure tank and the tank; wherein the high pressure tank has a first pressure gauge and a second pressure gauge (seen at 7); wherein the high pressure tank has a connector (proximate 4) mounted on the high pressure tank for connection with the connection tube. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the gas in the high pressure tank of FR 2421669 with nitrogen as taught by JP 3-72934 for the purpose of enhancing the dispersion of the material in the tank (per the abstract).

14. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR 2482471.

Although not germane to patentability as explained above, FR 2482471 discloses a gas in the high pressure tank but not nitrogen. JP 3-72934 discloses in Figure 1 the recited subcombination of a stirring device including an air output device 6 adapted to be immersed in the tank 1; a high pressure tank 4 containing **nitrogen** (per the abstract) adapted to be in communication with the tank by a connection tube 5; a unidirectional valve 8 in communication with the high pressure tank and the tank; wherein the high pressure tank has a first pressure gauge and a second pressure gauge (seen at 7); wherein the high pressure tank has a connector (proximate 4) mounted on the high pressure tank for connection with the connection tube. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have substituted the gas in the high pressure tank of FR 2482471 with nitrogen as taught by JP 3-72934 for the purpose of enhancing the dispersion of the material in the tank (per the abstract).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Charles E. Cooley
Primary Examiner
Art Unit 1723

21 September 2006